

Notice of Allowability

Application No.

10/632,157

Examiner

Richard Pantoliano Jr

Applicant(s)

SALO ET AL.

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 06 February 2007 and telephonic interview on 22 February 2007.
2. ☒ The allowed claim(s) is/are 2, 3, 5, 6, 7, 8, 10, 11, 14, 16, 17, 20, now renumbered 1-12, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20070222
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

WENG-AL T. AN
SUPERVISORY PATENT EXAMINER
JAN 2007

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephonic interview with Mr. D. Randal Ayers (Registration #: 40,493) on 22 February 2007.
3. The claims have been amended as follows:
 - a. Cancel **claims 4, 12, and 18**;
 - b. Claim 2: replace claim 2 with:
 2. A method of maintaining association integrity of Enterprise JavaBeans (EJBs) during EJB passivation and reactivation comprising:
 - obtaining a collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in response to traversing the one-to-many or many-to-many association of the source EJB;
 - registering the collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in a collection registry;

wherein the registering comprises registering the collection of target EJBs that are associate with a source EJB in a one-to-many or many-to-many association in the collection registry in response to passivation of the source;

reactivating the source EJB;

fetching the collection of target EJBs that are associated with the source EJB that is reactivated from the collection registry if the collection of target EJBs that are associated with the source EJB is registered in the collection registry; and

materializing the collection of the target EJBs that are associated with the source EJB that is reactivated from secondary storage if the collection of target EJBs that are associated with the source EJB is not registered in the collection registry.

c. Claim 10: replace claim 10 with the following:

10. A system for maintaining association integrity of Enterprise JavaBeans (EJBs) during EJB passivation and reactivation comprising:

a computer usable storage medium;

a collection registry;

a module that includes computer readable program code that is embodied in the computer usable storage medium, wherein the computer readable program code is configured to obtain a collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in response to

traversing the one-to-many or many-to-many association of the source EJB, and to register the collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in the collection registry;

wherein the module is configured to register the collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in the collection registry in response to passivation of the source EJB;

wherein the module is further configured to fetch the collection of target EJBs that are associated with a source EJB that is reactivated from the collection registry if the collection of target EJBs that are associated with the source EJB is registered in the collection registry, and materialize the collection of target EJBs that are associated with the source EJB that is reactivated from secondary storage if the collection of target EJBs that are associated with the source EJB is not registered in the collection registry.

d. Claim 16: replace claim 16 with the following:

16. A computer program product for maintaining association integrity of Enterprise JavaBeans (EJBs) during EJB passivation and reactivation, the computer program product comprising a computer usable storage medium having computer-readable program code embodied in the medium, the computer-readable program code comprising:

computer-readable program code that is configured to obtain a collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in response to traversing the one-to-many or many-to-many association of the source EJB;

computer-readable program code that is configured to register the collection of target EJBs that are associated with a source EJB in a one-to-many or many-to-many association in a collection registry;

computer-readable program code that is configured to fetch the collection of target EJBs that are associated with a source EJB that is reactivated from the collection registry if the collection of target EJBs that are associated with the source EJB is registered in the collection registry; and

computer-readable program code that is configured to materialize the collection of target EJBs that are associated with the source EJB that is reactivated from secondary storage if the collection of target EJBs that are associated with the source EJB is not registered in the collection registry.

Reasons For Allowance

4. The following is an examiner's statement of reasons for allowance:

The prior art of record, BEA Systems ("*The WebLogic Server EJB Container and Supported Services*", http://e-docs.bea.com/wls/docs70/ejb/EJB_environment.html, p1-27, published 25 June 2002) and Sun (*Enterprise JavaBeans™ Specification Version 2.0*", Sun Microsystems Inc., 22 August 2001) do not expressly teach or render obvious the invention as recited in independent claims 2, 5, 10 and 16.

As per claims 2, 10 and 16, the prior art does not teach or suggest registering the collection of EJBs associated with the source EJB in a collection registry, fetching the target EJBs that are associated with the source EJB, or materializing the collection if said target EJBs are not found in the collection registry. In addition, the prior art of record does not provide a basis of evidence for asserting a motivation that one of ordinary skill in the art at the time the invention was made would have modified the computer system for maintaining association integrity of Enterprise JavaBeans to incorporate the above listed limitations as recited in the context of independent claims 2, 10 and 16.

As per claim 5, in addition to the limitations listed above for claims 2, 10 and 16, the prior art does not teach or suggest the creation of a collection registry using a link factory. In addition, the prior art of record does not provide a basis of evidence for asserting a motivation that one of ordinary skill in the art at the time the invention was made would have modified the method for maintaining association integrity of Enterprise JavaBeans to incorporate the above listed limitations as recited in the context of independent claim 5.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Pantoliano Jr whose telephone number is (571) 270-1049. The examiner can normally be reached on Monday-Thursday, 8am - 4 pm EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


SUPERVISORY PATENT EXAMINER
JULY 2009